

APPENDIX A: MARKED COPY OF CLAIMS AFTER AMENDMENT WITH

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104. (Amended) The method of claim 97, wherein at least one of the DNA segments comprising an open reading frame is produced *in vitro* [*in vivo*] and then non-covalently linked to the promoter *in vitro*.

117. (Amended) The composition of claim 116 wherein individual linear or circular expression elements encoding all potential antigens [allergens] of a virus is comprised in the plurality of types of linear or circular expression elements.

APPENDIX B: COPY OF PENDING CLAIMS AFTER AMENDMENT

1. A composition comprising one or more antigen, the one or more antigen determined by a method comprising:
preparing *in vitro* a plurality of linear or circular expression elements produced by a method comprising:
obtaining plurality of DNA segments comprising an open reading frame; and linking open reading frames to promoters to create a plurality of linear or circular expression elements;
introducing the plurality of linear or circular expression elements into an animal; and selecting from the plurality of linear or circular expression elements one or more open reading frames that encode an antigen effective to generate an immune response.
2. The composition of claim 1, further defined as comprising one or more cancer antigen.
3. The method of claim 1, further defined as comprising one or more pathogen antigen.
4. The composition of claim 3, wherein the one or more pathogen antigen is a one or more virus, bacterium, fungus, alga, protozoan, arthropod, nematode, platyhelminthe, or plant antigen.
5. The composition of claim 3, wherein the one or more pathogen antigen is a virus antigen.
6. The composition of claim 3, wherein the one or more pathogen antigen is a bacterium antigen.
7. The composition of claim 3, wherein the one or more pathogen antigen is a fungus antigen.

- 8. The method of claim 1, wherein at least one of the DNA segments comprising an open reading frame is produced *in vitro* and then non-covalently linked to the promoter *in vitro*.
- 9. The method of claim 1, wherein at least one of the DNA segments comprising an open reading frame is obtained by using a polymerase chain reaction.
- 10. The method of claim 1, wherein at least one of the DNA segments comprising an open reading frame is obtained by chemical synthesis.
- 11. The composition of claim 1, wherein linking open reading frames to promoters comprises non-covalent linking.
- 12. The composition of claim 1, wherein preparing the plurality of linear or circular expression elements further comprises linking open reading frames to terminators.
- 13. The composition of claim 12, wherein linking open reading frames to terminator comprises non-covalent linking.
- 14. The composition of claim 1, wherein the linear or circular expression element is injected into the organism.
- 15. The composition of claim 1, wherein the organism is an animal.
- 16. The composition of claim 1, wherein the animal is a human.
- 17. The composition of claim 1, wherein the plurality of linear or circular expression elements comprises open reading frames encoding at least one polypeptide from a cancer cell.